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Peter Cameron

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Cameron - 1908

A CONTRIBUTION TO THE ACULEATE HYMENOPTERA
OF THE BOMBAY PRESIDENCY. BY P. CAMERON.

[From the JOURNAL OF THE BOMBAY NATURAL HISTORY SOCIETY,
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W. E. LaBerge

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July 15, 1908.]

A CONTRIBUTION TO THE ACULEATE HYMENOPTERA
OF THE BOMBAY PRESIDENCY.

BY

P. CAMERON.

(Continued from page 311 of this Volume.)

Tetralonia ovatula, sp. nov.

Black, the flagellum ferruginous, the basal joints black above, the pubescence on the mesonotum and scutellum dark ferruginous, on the occiput, cheeks and metanotum pale fulvous; the base of the abdomen covered with white hair; the base of the 2nd segment with white pile, narrowly in the middle, widely on the sides, the 3rd with a much broader band, only slightly narrowed in the middle; the 4th is entirely covered with similar pubescence; the pubescence on the apical 2 stiff, black; on the ventral segments it is dark soot coloured. Wings hyaline, the nervures, costa and stigma black; the 2nd abscissa of radius longer than the 3rd—about one-fourth longer. The trochanters and femora are pale fuscous, the 4 apical joints of the hind tarsi are dark testaceous. ♀.

Length 10 mm.

Deesa. August. (Nurse.)

A broad ovate species. Clypeus punctured in the middle, the punctures clearly separated, distinct; it is almost square; the pubescence on it and on the labrum blackish. Mandibles yellowish at the base. Mesonotum and metanotum covered closely with round shallow punctures. The hair on the legs is whitish, except on the innerside of the hind tibiae and tarsi on which it is black.

This does not appear to me to be the ♀ either of *duvancellii* or *glabricornis*; it is a broader insect than the latter, has the alar nervures black, not testaceous, the 2nd abscissa of the radius is longer than the 3rd, the opposite being the case with *glabricornis*, the clypeus is square and the apical tarsal joints much darker.

Tetralonia glabricornis, sp. nov.

Black, the flagellum of antennæ smooth, bare, shining; bright rufous, the clypeus, sides of cheeks broadly below, the lateral dilated part rounded on the

[1]

outerside, labrum, base of mandibles to near the middle, and tegulae yellow, the pubescence on the pro and mesothorax and scutellum, rufo-fulvous (probably faded) the pubescence on the sides and back of the head, pleurae and sternum pale, almost white; the pubescence on the base of abdomen pale fulvous; there is a band of white depressed pile on the base of the 2nd segment, much narrowed in the middle, on the sides reaching to the middle of the segment, a much broader band on the 3rd, not narrowed in the middle, the whole of the 4th and 5th covered with similar pubescence; the pygidium black, bare, the sides of the segment covered with long black pubescence. Pubescence on the legs white, on the underside of the metatarsus rufous; the apical 4 tarsal joints pale testaceous. Wings hyaline, a little tinged with fulvous, the costa, stigma and nervures testaceous. ♂.

Length 10-11 mm.

Deesa. August. (Nurse.)

Antennae as long as the body, the apical joints curved, clypeus longer than wide, coarsely, closely punctured; the labrum strongly, but not so closely punctured; the apex of the clypeus is transverse, with the sides rounded. Mesonotum punctured, but not so closely nor so strongly as the clypeus. The basal 2 abscissae of the radius are of equal length; the 3rd is fully one-fourth longer; the 1st recurrent nervure is interstitial, the 2nd nearly so.

This does not appear to me to be *duvancelii*, Lep.; according to Bingham, that has the clypeus "square, very slightly emarginate anteriorly and very lightly punctured," in my species it is transverse and quite strongly punctured; the "6th and apical segments with fuscous pubescence;" here black; the clypeus in *glabricornis* is not "nearly square," but distinctly longer than wide; according to Bingham, too, the thorax is more strongly punctured than the head, the reverse being the case here.

Megachile gathela, sp. nov.

Black, the head and thorax densely covered with white pubescence; the abdomen with 5 distinct white hair bands, the scopa white, wings hyaline, the stigma fuscous, the nervures blacker, the basal 2 abscissae of the radius equal in length; both the recurrent nervures are received close to the transverse cubitals. Mandibles bidentate, both the teeth broad, the 2nd smaller than the 1st; the basal half of mandibles densely covered with white pubescence. Pubescence on legs white, that on the underside of hind metatarsus tinged with rufous. Apex of hind tibiae one-fourth thicker than the base of metatarsus. ♀.

Length 7 mm.

Deesa. January and February.

Head wider than the thorax, the temples short. Clypeus with the sides strongly punctured, the centre almost smooth. Metanotal area strongly aciculated, the rest punctured, but not strongly. Back of abdomen closely punctured, the pygidium more closely than the rest. The fore coxae in the ♂ are armed with a longish stout tooth, which is clearly longer than it is

wide at the base. The apex of the abdomen, in the ♂, is armed with 6 irregular, not very strong pale and black teeth, the central 2 being widely separated; the part behind them is depressed. The temples are wider than they are in the ♀.

Megachile bombayensis, sp. nov.

Black, the hair on the head and thorax white, the dorsal abdominal segments narrowly banded with white pubescence, the scopa on apical half red, on basal white; wings clear hyaline; the legs for the greater part fuscous; the mandibles bluntly bidentate at the apex, the base broadly dilated in the middle; base of hind metatarsus two-thirds of the width of the apex of tibiae, ♀.

Length 8 mm.; breadth 3 mm.

"Bombay."

Head slightly wider than the thorax, closely strongly punctured, the face smooth, shining and bare in the middle; the clypeus not much wider than long, a smooth, irregular line in the centre above, its apex transverse. Base of mandibles thickly covered with depressed white pubescence; shining and bearing scattered punctures; there is a testaceous space behind the teeth. Except on the underside of the fore tarsi, where it is fulvous, the pubescence on the legs is white; the calcaria whitish. The back of abdomen is closely punctured all over; there are no distinct transverse furrows. The 2nd transverse cubital nervure is not quite interstitial; tegulae fuscous; nervures black. ♀.

Comes near to *M. hera*, Bing. and *M. chlorigaster*, Cam.

Megachile lissopoda, sp. nov.

Black, the hair on the head, upper part of thorax and the scopa, white, the pubescence on the pleurae soot-coloured, the hair on the legs grey, that on the underside of the fore metatarsus mixed with golden; wings fuscous-hyaline to the 2nd transverse cubital nervure, almost hyaline beyond it. Mandibles bidentate, the upper tooth broad, rounded, projecting slightly beyond the lower, which is almost transverse; the 2 at their junction are separated by a depression; the basal half of the mandibles closely punctured and opaque, the apical smooth and shining. ♀.

Length 11 mm.

"Bombay."

Head and thorax closely, distinctly punctured. Base of hind tarsi less than half the width of the apex of tibiae; the spurs black, slender on apical half, gradually narrowed to a sharp point. Head nearly as wide as the thorax. The 2nd transverse cubital nervure is almost interstitial. Underside of flagellum piceous. The tarsi are rather long and slender. The transverse bands of white pubescence on the dorsal abdominal segments are narrow, but distinct. The punctures on the mesonotum run into transverse striae. Face broadly roundly convex. Clypeus short, its apex broad, transverse; the front with a narrow smooth keel between the antennae.

In Bingham's arrangement this species comes near to *M. cephalotus*, Sm.; that species from the description should be different, e. g. the mandibles are called

"long, narrow and curved" (no mention is made of the form or number of their teeth) terms which certainly do not fit those of the present species, in which they are broad both at the base and apex; the head is "broader than the thorax," while in *lissopoda* it is certainly not so. The colour of the wings is not stated by Col. Bingham, but Smith (Cat. Hym. i, 179) calls them sub-fuscous, hyaline towards their base," the exact opposite being the case with the species I have described above.

Megachile cathena, sp. nov.

Black, the pubescence and ventral scopa white, the puncturation distinct and close, strongest on the apex of the abdomen; wings hyaline, the nervures and stigma black, the 1st recurrent nervure received shortly behind the middle of the cellule, the 2nd near the apex, but clearly separated from the transverse cubital. Mandibles bidentate, the teeth distinct, the 2nd small compared with the 1st, clearly separated; the part behind them testaceous, covered with golden pubescence, the basal part thickly with silvery. Head large, as wide as the thorax, the occiput rounded inwardly, not transverse. Apex of clypeus transverse, depressed. Base of metanotum forming a distinct border. The pubescence on the front, face and clypeus is dense. The calcaria are black. Base of hind metatarsus half the width of the apex of tibiae, the pubescence on the lower side of the metatarsus is white.

Length 3 mm. ♀.

This little species comes close to *M. niccivillii*, Cam.; the latter is a larger species, it has the apical tooth of the mandibles distinctly longer than its width at the base, while in the present it is not much longer than the basal width; it wants the clearly defined margined border on the top of the metanotum and the 1st recurrent nervure is received nearer the base.

Megachile cratodonta, sp. nov.

Length 6.7 mm. ♂.

Deesa. January.

Very similar in size and colouration to *M. gathela*, described above; but easily separated from it by the stronger mandibular teeth, there being also, instead of a broad rounded swelling behind the 2 apical teeth, a large, clearly separated tooth, which is distinctly larger than either of the apical ones; while the abdominal teeth are much larger, clearly defined and black. Of the latter there are 4 distinct ones, the 2 central being longer, broader and much more clearly separated than the outer; outside the latter there is a smaller, less distinct tooth. There are 2 stout teeth on the fore coxae. Base of hind metatarsus not half the width of apex of tibiae, the spurs pale. Wing nervures and stigma black. Metanotal area closely aciculated.

Megachile calioxysides, Bing.

Col. Nurse has briefly characterized the ♂ of this species in the Journal, Asiatic Society of Bengal, LXX, 1901, p. 150. It may be useful to describe the anal segment more fully. In the centre are 2 widely separated teeth, the space between them forming a semicircle; on either side of this are 2 shorter

sharp teeth with a slight stumpy one beyond them ; all these teeth have the apices testaceous. Probably the teeth vary in length and thickness. The mandibles are broad, bidentate, the teeth triangular, the apical much larger than the other ; the basal part is broadly, but not much, dilated in the centre ; the puncturation on the basal part is coarse.

Megachile subfuscus (Nurse, M.S.), s.p. nov.

Black, the hair on the front, top of thorax and base of abdomen pale rufo-fulvous, that on the rest of the head and thorax much paler, the apices of the 2nd to 4th abdominal segments with bands of pale fulvous pubescence, the hair on the apical 2 segments black, the hair on the legs white, except on the underside of the posterior metatarsus, where it is bright rufous. Wings hyaline, the apex slightly, broadly infuscated, the stigma fuscous, the nervures black. Apex of abdomen with a slight, wide somewhat irregular incision. Mandibles bidentate, the apical tooth long, more than twice longer than it is wide at the base, the subapical clearly separated, transverse at the apex, not separated behind. Fore legs unarmed ; there is a minute tooth on the lowerside, near the apex of the middle femora. Apex of clypeus almost transverse. Base of metatarsus two-thirds of the width of apex of tibiae. 2nd abscissa of radius distinctly longer than the 1st. Apical segments of abdomen closely, finely, rugosely punctured, opaque.

Length 9 mm.

Belongs to Bingham's Section E.

Matheran. March.

Megachile indostana, s.p. nov.

Black, the flagellum except on top rufo-fulvous, mandibles except at apex for the greater part rufo-fulvous, the part before apex tinged with yellow, the head and thorax densely covered with long white pubescence, that on the mesonotum tinged with fuscous ; apical segment of abdomen with a squarish projection in the middle and a stout, triangular tooth on either side. Mandibles ending in a long tooth which becomes gradually narrowed, the part at its base projects distinctly, is transverse but does not form a tooth. Legs unarmed. All the abdominal segments are lined with narrow bands of white pubescence. Wings hyaline, the stigma dark testaceous, the nervures blackish. ♂.

Length 6 mm.

Deesa. March.

The pubescence on the face and clypeus is very long and dense, hiding completely the surface. Front and vertex closely, but not very strongly, punctured ; the puncturation on the thorax is as strong, but not quite so close ; on the abdomen it is finer ; the latter has no transverse furrows or depressions. Metanotal area smooth, shining, bare. Alar nervures dark testaceous. Apex of tarsi rufous. Head as wide as thorax. Base of hind metatarsus half the width of apex of tibiae.

Megachile rugicauda, sp. nov.

Black, the hair on the head and thorax white, as it is also on the legs; the dorsal bands on the abdomen are darker tinted, the scopa bright ferruginous; wings hyaline, the stigma and nervures black, the tegulae grey. Mandibles bidentate, the apical tooth broad, bluntly rounded at the apex, not much narrowed, the subapical short, broad, rounded, not clearly separated behind. ♀.

Length 12-13 mm.

Deesa. August.

Clypeus not quite transverse at the apex; wider than long. Head a little wider than the thorax, the temples straight, obliquely narrowed. Head, pro- and mesothorax opaque, closely, but not strongly punctured, the metanotum smooth, shining. Abdomen finely, closely punctured on the back, without distinct transverse depressions. Legs with the black colour largely suffused with piceous, the base of hind metatarsus not half the width of the apex of tibiae; calcaria white. The 1st abscissa of radius is a little longer than the 2nd; the 2nd transverse cubital nervure is roundly curved on the lower half. Flagellum brownish below.

The ♂ is similarly coloured except that the piceous colour on the legs is more marked, the fore tibiae are rufo-testaceous, their tarsi being of a paler colour and densely covered with long, clear white pubescence; the fore coxae are armed with conspicuous teeth broad at the base, becoming gradually narrowed towards the apex; the last abdominal segment is coarsely punctured, and is armed with 3 teeth on either side, the inner of which is longer and narrower than the middle one, which is broad and bluntly rounded; the outer is smaller than it. The mandibles, except the teeth, are yellow, suffused with testaceous; the clypeus is largely suffused with rufous.

Probably the colouration of the legs varies especially as regards the amount of testaceous colour in the ♂ and of piceous in the ♀. In the ♂ the ventral segments are banded with white pubescence.

This species will enter into in Bingham's Section F; it is very different from the known species in it.

The last abdominal segment in both sexes is more coarsely punctured than usual, but more particularly in the ♂.

Megachile lerma (Nurse, M. S.), sp. nov.

Black, the thorax above, the pleurae above and the basal 2 segments of abdomen densely covered with reddish fulvous pubescence, the pubescence on the head and legs, except on the underside of the tarsi, where it is white, black; the apices of the 3rd, 4th and 5th abdominal segments with narrow bands of white pubescence, the white on the 3rd mixed with fulvous in the middle; wings reddish fulvous to the apex of the stigma, fuscous, slightly tinged with violaceous at the apex. Scopa white. ♀.

Length 12 mm.

Matheran. March.

Head strongly, closely punctured; the clypeus is slightly more strongly, rugosely punctured. Mandibles strongly punctured except at the apex, where

there are 2 broad bluntly rounded teeth, the 2nd being blunter and shorter than the apical. Base of hind metatarsus about one-third narrower than the apex of tibiae; tarsal spines dark rufous, the spurs almost black. Temples broad; occiput broadly roundly incised. There is no smooth line in the centre of the clypeus.

Comes near to *M. lanata*, F. Apart from that species having the pubescence on the head fulvous, it has the mandibles longer, sharper and with the teeth sharp-pointed, there is a smooth line in the centre of clypeus and the wings are light fulvous at the base.

Megachile leptodonta, sp. nov.

Black, the ventral surface ferruginous, the pubescence short, clear white all over; the mandibles, except the teeth, pale yellowish testaceous, legs rufo-testaceous, all the coxae and the base of fore femora black; flagellum of antennae rufous, darker above. Wings clear hyaline, costa and nervures black, the stigma dark testaceous, tegulae rufo-testaceous. ♀

Length 6 mm.

Deesa. December.

Head distinctly broader than the thorax. Mandibles bidentate, the apical long, gradually narrowed to a sharp point, the subapical broad at the base gradually narrowed to a point at the apex, short, broader at the base than it is long; from it there is a broad shallow curve to the base; the teeth appear broader than usual and are covered with white pubescence at the base. Head closely punctured; the clypeus with a smooth line in the centre broadest above. Thorax closely punctured; metanotal area aciculated. The apical ventral surface is darker coloured than the rest. Base of hind metatarsus about one-fourth narrower than the apex of tibiae. There are no depressions or furrows on the back of abdomen, which is roundly convex. The 1st recurrent nervure is received shortly beyond the apex of the basal fourth; the 2nd nearer the apex. Tegulae pale testaceous.

In one example the back of the abdomen is brownish for the greater part; in another the segments are only brownish under the pile.

Megachile erythrostoma, sp. nov.

Black, the apex of clypeus broadly, the mandibles broadly at the base, and the femora and tibiae more or less in front, rufous; the greater part of the flagellum piceous, the hair on the thorax, upper part of abdomen and head white, the ventral scopa bright red; wings clear hyaline, the nervures black. Mandibles large, tridentate, the apical tooth long, bluntly narrowed, the apex somewhat broadly rounded; the 2nd large, clearly separated from the apical, the apex roundly narrowed, longer than it is wide at the base; the 3rd is shorter, broader, not so oblique and turned inwardly. Apex of clypeus broadly rounded. Punctuation of head and thorax fine and close, that on the scutellum stronger than on the mesonotum; that on the abdomen is still finer. The abdomen becomes gradually narrowed towards the apex, which forms a bluntly-rounded

point ; the latter is rufous at the apex ; there are no distinct transverse furrows or depressions on the dorsal surface. ♀.

Length 11 mm.

Deesa.

The mandibles are longer than usual and more particularly the apical tooth, especially as regards the length compared with the width at the base. The abdomen, too, becomes more distinctly narrowed from the base to the apex. Base of hind tarsi half the width of tibiæ.

Megachile suavida, sp. nov.

Black, the mandibles, except the teeth, pale yellow ; flagellum for the greater part reddish, the hind femora and tibiæ except above and the tarsi rufous ; the hair on the head and thorax long and dense ; all the abdominal segments with distinct bands of white pubescence on the apex ; the basal ventral segments rufous ; wings clear hyaline, the nervures black ; tegulæ piceous. ♂.

Length 7 mm.

Deesa, December (Nurse).

Mandibles bidentate, the apical tooth long, narrowed gradually towards the apex, which is bluntly rounded ; the subapical one short, broad, bluntly rounded. Punctuation on the head and thorax close, distinct ; that on the scutellum is closer and finer than on the mesonotum. Abdominal punctuation finer than on the thorax ; it is close. Apical abdominal segment broadly rounded ; its sides at the base armed with a long tooth, which becomes gradually narrowed from the base to the apex. Coxæ unarmed. Antennæ stout, not much longer than the thorax. Head large, slightly wider than the thorax. Radial cellule ending in a sharp angle ; the 2nd recurrent nervure distinctly distant from the transverse cubital, it being separated from it by about the same distance as is the 1st from the base of the cellule. Probably the amount of rufous colour on the base of the abdomen varies ; it is more conspicuous on the sides than on the centre. The forelegs may be more or less rufous at the base ; the legs are unarmed.

Is not unlike *M. phao*la Cam. and *M. elfroma* Cam., but is larger, stouter and has the antennæ much shorter.

Megachile ? anonyma, sp. nov.

Black, the underside of the flagellum brown, the hair on the head and thorax dense, white, the abdominal segments with distinct bands of white pubescence ; the middle of the mandibles broadly and the greater part of the tarsi rufotestaceous ; wings hyaline, the stigma testaceous, the nervures darker coloured ; both the recurrent nervures distinctly separated from the transverse cubitals, the 1st more widely separated from the 2nd than is the 1st from the basal apex of abdomen 3-dentate, the central tooth broad, square, the lateral much smaller and shorter, somewhat triangular. Mandibles bidentate, the apical tooth longish, sharp-pointed at the apex, the subapical wide, longer than the apical, its outer edge slightly rounded inwardly, clearly separated behind. Head and thorax closely punctured, the metanotum at the base smooth, shining,

bare. Occiput transverse. Middle of mandibles broadly rufo-testaceous, their base thickly covered with white pubescence. Forelegs unarmed. Calcaria white. The puncturation on the abdomen becomes stronger towards the apex ; on the ventral surface it is strong and close, especially on the basal half. The fore tarsi are for the greater part rufo-testaceous, as are also the tarsal spines. Tegulae rufo-testaceous. ♂.

Length 7 mm.

Deesa, December.

Col. Nurse has the following note attached to this species : " I have carefully examined mouth parts with the microscope and find the labial palpi 4-jointed and maxillary palpi 4-jointed, so it cannot be a *Megachile*." Apart from this I cannot separate it from the latter genus. Its generic location may, in the meantime, be left over, until the ♀ has been discovered.

Thaumatoma testaceicorne, sp. nov.

Black, the antennae except the scape and apical joint testaceous, darker above, the pubescence dense and white, the puncturation strong and close ; the apical abdominal segment curved downwards, entire, broadly rounded, the outer edges straight, oblique ; metanotum roundly convex, smooth, shining, bare, the base with a striated border, keeled before and behind and much widened laterally. Basal segments of abdomen testaceous below. The pubescence on the lower part of the head is much longer and denser than elsewhere, especially behind. The hair on the underside of the apex of the 4 posterior tibiae and, to a less extent, on the anterior, is long and dense, as it is also on the base of the tarsi. Mandibles with the apical tooth distinctly separated ; there is no distinct sub-apical one. The joints of the flagellum to the flattened apical one are of equal thickness ; the last is long, dilated and flattened. First recurrent nervure interstitial ; the 2nd received near the apex. ♂.

Length 7 mm.

Matheran, May (Nurse).

There are 2 points in which the known Indian *Thaumatoma* (*T. burmanicum*, Bing.) differs from that here described : the apex of the abdomen ends in a longish central and a smaller lateral tooth and the 4 sub-apical joints of the antennae are attenuated and filiform as compared with the preceding joints.

Ceratina spilaspis, sp. nov.

Green, the abdomen dark brown, the following parts bright yellow : clypeus, labrum, mandibles, except at the apex, underside of scape, a line on the pronotum uniting with the tubercles, the latter, tegulae, a mark on the sides of the scutellum, post-scutellum broad lines on the sides of the 2nd and 3rd segments at the base, straight and twice the width of the central part, a narrow, almost continuous line on the 4th, a broad, curved one on the 5th roundly narrowed in the middle on the 5th, the apex of the femora narrowly, the tibiae and the tarsi, bright lemon-yellow, the hind tibiae broadly black at the apex ; the hair white on the body and legs ; wings clear hyaline, the nervures, costa and stigma pale yellow. ♂.

Length 6 mm.

Deesa, April.

Underside of flagellum pale brown or fulvous. Clypeus with a few strong punctures in the centre; the face more finely and more closely punctured. Mesonotum finely, closely punctured; there is a distinct furrow on the sides opposite the tegulae, the scutellum bears scattered punctures in the centre; the base of metanotum is much more strongly, regularly and closely punctured; its apical slope is smooth. Abdomen shining, impunctate. There are 2 obscure lines on the apex of the clypeus.

This species is not unlike *C. divisa*, Cam.; the latter may be known from it by the transverse yellow line on the apex of the mesonotum, by the lines on the 4th abdominal segment being much thicker and distinctly interrupted in the middle and by that on the 5th being much wider, it clearly extending beyond the middle of the segment, it being also not so distinctly narrowed in the middle.

Nomia abuensis, sp. nov.

Black, the pubescence cinereous, almost white, the apices of the abdominal segments with white pubescent bands, the basal metanotal area irregularly striated, the centre with a Λ -shaped area with a keel down the centre; wings almost hyaline, highly iridescent, the stigma dark testaceous, the nervures darker coloured; tegulae blackish on inner half, pale testaceous on outer. ♀.

Length 6 mm.

Abu (Nurse).

Head closely, strongly punctured, the punctures stronger on the sides of the vertex than elsewhere. Face broadly raised in the centre. Mesonotum and scutellum closely and much more finely punctured than the head; the pronotum densely covered at the base with white pubescence; it is raised at the base, the basal slope being bare; the pubescence extends along the top to the tegulae. Post-scutellum densely covered with white pubescence. Metanotum wrinkled; it has a somewhat steep slope; it is weakly keeled down the centre and on the outer edges. Pleurae alutaceous. Flagellum brownish red below. Apical joints of tarsi rufous. 2nd cubital cellule not much longer along the transverse cubitals than it is along the radius; 2nd abscissa of radius about one-fourth shorter than the 3rd.

Nomia collina, sp. nov.

Length 7 mm. ♀.

Mount Abu.

This species is very close to *N. abuensis*; the differences can be best shown in synoptical form.

Base of metanotum with a crenulated area; 2nd cubital cellule wide, 3rd abscissa of radius about one-fourth longer than 2nd, the 2nd transverse cubital nervure straight	<i>Abuensis.</i>
Base of metanotum without a crenulated area; 2nd cubital cellule narrow, 3rd abscissa of radius 4 times longer than 2nd; the 2nd transverse cubital nervure curved	<i>Collina.</i>

Metanotum opaque, alutaceous, neither the centre nor the sides are keeled; the apex of the basal area is prolonged in the centre into a sharp point; head, pro- and mesothorax closely, not very strongly punctured; the puncturation on the face and clypeus runs into obscure reticulations; there is an impressed line on the centre of the front, running into the top of the face. Tegulæ pale testaceous, darker coloured on the innerside. Abdomen fully longer than the head and thorax united; the basal segment is covered at the base with white pubescences; the apices of the segments with bands of white depressed pile. Tips of tarsi rufous. Middle of face not distinctly raised.

Ccelioxys latus, sp. nov.

Short, wide compared with the length, the clypeus, the greater part of the face and front, outer orbits, collar, spot in centre of mesonotum at the base, a spot behind tegulæ, 2 spots at base of scutellum, apical slope of scutellum, pleuræ, the sides of 1st abdominal segment, the apices and bases of the segments narrowly, their sides widely, a spot in the centre of the 1st ventral and the apices of the others widely covered with white pubescence, as are also the greater part of the legs. Wings hyaline, tinged broadly with violaceous at the apex. ♀.

Length 8 mm.

Matheran, March.

Scutellum broadly rounded posteriorly, the teeth stout, bluntly pointed, broader laterally than above. Ventral plate of apical segment large, spoon-shaped, with a broad rounded upper border, keeled on the inner edge. The apex of the apical dorsal segment is strongly, coarsely punctured, depressed and with a smooth, stout keel in the centre of the depression. There is a transverse, somewhat broad keel near the apex of the 2nd and 3rd segments, bordered before and behind by a smooth, shallow furrow. Frontal keel broad, smooth on lower half only.

Puncturation on the head strong and close, on the scutellum it is closer, running into reticulations. The apical ventral segment projects half the length of the dorsal beyond the apex of the latter. The part between the broad frontal keel and the ocelli is depressed.

In Bingham's key this little species would come into A, b.; it cannot be confounded with *fuscipennis* or *angulatus*.

